

In the Claims:

1. (previously amended) A flooring system comprising:
- a subfloor;
 - a decorative top layer;
 - a substrate having a top surface and an oppositely facing bottom surface, the bottom surface is positioned proximate the subfloor and the top surface is positioned proximate the decorative top layer, the substrate having a thickness of about 10 mm and voids which extend between the top surface and the bottom surface, the substrate is manufactured from rubber in sheets which are cut to a desired configuration;
- whereby the substrate has the strength characteristics to support the decorative layer and prevent damage thereto and the sound dampening characteristics to provide decibel reduction through the substrate.
2. (original) The flooring system as recited in claim 1 wherein the density of the substrate is less than 1000 kilograms per meter cubed.
3. (original) The flooring system as recited in claim 1 wherein the substrate has the strength characteristics required to support the decorative layer while having sufficient resiliency to allow the substrate to be delivered in rolls.
4. (original) The flooring system as recited in claim 1 wherein the substrate is fixed to the subfloor by means of an adhesive.

5. (original) The flooring system as recited in claim 1 wherein the substrate is fixed to the decorative top layer by means of an adhesive.

6. (original) The flooring system as recited in claim 1 wherein the substrate is made from an SBR rubber material.

7. (original) The flooring system as recited in claim 1 wherein the sound dampening characteristics exhibit a decibel reduction of approximately 20 dB for a substrate with a thickness of 5 mm.

Cl 8. (currently amended) A substrate for use in a flooring system which has a subfloor and a decorative upper layer, the substrate comprising:

a sheet having a bottom surface configured for frictional interface with the subfloor, a top surface configured for receiving the decorative upper layer, side surfaces and end surfaces, the top surface and the oppositely facing bottom surface are essentially parallel to each other and are spaced apart by a thickness of the substrate, the thickness of the substrate being about 10 mm;

voids are provided in the substrate, the voids are provided between particles of rubber such that when the substrate is positioned between the subfloor and the decorative top layer, the particles of rubber provide the strength required to prevent deformation of the substrate in the direction of the thickness and the voids contribute to the sound dampening characteristics required to provide decibel reduction across the thickness of the substrate.

9. (original) The substrate for use in a flooring system as recited in claim 8 wherein the density of the substrate is less than 1000 kilograms per meter cubed.

10. (original) The substrate for use in a flooring system as recited in claim 8 wherein the substrate has the strength characteristics required to support the decorative layer while having sufficient resiliency to allow the substrate to be delivered in rolls.

11. (original) The substrate for use in a flooring system as recited in claim 8 wherein the substrate is made from an SBR rubber material.

12. (original) The substrate for use in a flooring system as recited in claim 8 wherein the sound dampening characteristics exhibit a decibel reduction of approximately 20dB for a substrate with a thickness of 5 mm.

13. (currently amended) A substrate for use in a flooring system which has a subfloor and a decorative upper layer, the substrate comprising:

a continuous sheet having a bottom surface frictional interfaced with the subfloor, a top surface configured for receiving the decorative upper layer, side surfaces and end surfaces, the top surface and the oppositely facing bottom surface are essentially parallel to each other and are spaced apart by a thickness of the substrate, the thickness of the substrate being about 10 mm;

voids are provided in the substrate, the voids are provided between particles of material of the substrate, such that the particles of material provide the strength required to prevent deformation of the substrate in the direction of the thickness and the voids contribute to the sound dampening characteristics required to provide decibel reduction across the thickness of the substrate.

14. (original) The substrate for use in a flooring system as recited in claim 13 wherein the continuous sheet is cut to the appropriate length to fit the space requirements.

15. (original) The substrate for use in a flooring system as recited in claim 13 wherein the density of the substrate is less than 1000 kilograms per meter cubed.

16. (original) The substrate for use in a flooring system as recited in claim 13 wherein the substrate has the strength characteristics required to support the decorative layer while having sufficient resiliency to allow the substrate to be delivered in rolls.


17. (original) The substrate for use in a flooring system as recited in claim 13 wherein the substrate is fixed to the subfloor by means of an adhesive.

18. (currently amended) The substrate for use in a flooring system as recited in claim 13 further comprising an adhesive for fixing ~~wherein the substrate is fixed to the decorative upper layer by means of an adhesive.~~

19. (original) The substrate for use in a flooring system as recited in claim 13 wherein the substrate is made from an SBR rubber material.

20. (original) The substrate for use in a flooring system as recited in claim 13 wherein the sound dampening characteristics exhibit a decibel reduction of approximately 20dB for a substrate with a thickness of 5 mm.

21. (currently amended) A substrate for use in a flooring system which has a subfloor and a decorative upper layer, the substrate comprising:

 a sheet having a bottom surface configured for frictional interface with the subfloor, a top surface configured for receiving the decorative upper layer, side surfaces and end surfaces, the top surface and the oppositely facing bottom surface are essentially parallel to each other and are spaced apart by the thickness of the substrate;

voids are provided in the substrate, the voids are provided between particles of the sheet, the sheet has a density of less than 1000 kilograms per meter cubed and a thickness of about 10 mm such that when the substrate is positioned between the subfloor and the decorative top layer, the particles provide the strength required to prevent deformation of the substrate in the direction of the thickness and the voids contribute to the sound dampening characteristics required to provide decibel reduction across the thickness of the substrate.

22. (original) The substrate for use in a flooring system as recited in claim 21 wherein the substrate has the strength characteristics required to support the decorative layer while having sufficient resiliency to allow the substrate to be delivered in rolls.

23. (original) The substrate for use in a flooring system as recited in claim 21 wherein the substrate is made from an SBR rubber material.

24. (original) The substrate for use in a flooring system as recited in claim 21 wherein the sound dampening characteristics exhibit a decibel reduction of approximately 20dB for a substrate with a thickness of 5 mm.

25. (previously added) The flooring system as recited in claim 1 wherein the rubber is formed in a cylindrical member and the sheets are cut from the cylindrical member.

26. (previously added) The substrate for use in a flooring system as recited in claim 13 wherein the continuous sheet is cut from a cylindrical member.

27. (previously added) The substrate for use in a flooring system as recited in claim 21 wherein the sheet is cut to a desired length from a cylindrical member made of rubber and polyurethane.

28. (withdrawn) A method of manufacturing a substrate for preventing the transmission of sound, comprising:

curing a mixture of rubber and polyurethane to form a cylindrical member of rubber; and

cutting a continuous sheet from an outside layer of the cylindrical member to form the substrate.

29. (new) The substrate for use in a flooring system as recited in claim 8 wherein the thickness of the substrate is less than 10 mm.

C/ 30. (new) The substrate for use in a flooring system as recited in claim 13 wherein the substrate includes a binder and particles of rubber, the binder and the particles of rubber being partially severed at the top surface and the bottom surface of the continuous sheet.

31. (new) The substrate for use in a flooring system as recited in claim 21 wherein the density of the sheet is less than 700 kilograms per meter cubed.